

Penzance B.S.A.C.

Conservation Officer's Report

March 2009

By carefully selecting which varieties of food crops to cultivate, much of Europe and North America could be cooled by up to 1°C during the summer growing season say researchers from Bristol University. This is equivalent to an annual global cooling of over 0.1°C, almost 20% of the total temperature increase since the Industrial Revolution. The growing of crops already produces a cooling of the climate because they reflect more sunlight back into space, compared with natural vegetation. Different varieties of the same crop vary significantly in their solar reflectivity (called 'albedo') so selecting varieties that are more reflective will enhance the cooling effect. The University team argue that we should select crop varieties in order to exert a control on the climate, in the same way that we cultivate specific varieties to maximise and fine-tune food. They emphasise that unlike growing biofuels, such a plan could be achieved without disrupting food production.



Dojo Loach

The Dojo Loach, a small yellowish fish from East Asia, was first discovered in the Ebro Delta, Spain in 2001, but has now become well established, and the spread of this oriental fish contrasts starkly with the decline of native fish in the rivers and wetlands throughout the Iberian Peninsula where 80% of the species are threatened. The introduction of species from different areas is one of the most serious threats to the preservation of Biodiversity. Nowadays, the majority of river basins throughout the Iberian Peninsula contain more foreign species of fish than native ones. Researchers believe that the Dojo Loach first appeared in

the Ebro delta after some escaped from a tropical fish distribution facility, and that such Centres that breed and maintain exotic fish pose a serious danger, and are an epicentre of the biological invasion process'

An amateur photographer, Sandra Critelli, captured some amazing pictures of Cow-nose Stingrays in The Gulf of Mexico, one of which is shown at right. There are around 70 species of stingrays in the world's oceans, but these cow-nosed rays have distinctive high domed heads, giving them a curiously bovine appearance. Measuring up to 6ft 6in across, these rays migrate in groups of up to 10,000 following a clockwise current from Mexico's Yucatan Peninsula to western Florida. Heading north in late spring and south in late autumn. Sharks are their main predators, but they can fight back for they have a very poisonous sting in the tail. The sting is a razor sharp spine on the whip like tail which can be 15 inches in length and carries a deadly dose of venom. It was a similar stinger that killed the hugely popular Australian naturalist Steve Irwin in 2006.



A rare Wrinkled Swimming Crab, *Liocarcinus corrugatus*, was found trapped in a prawn pot at 27 metres in the River Fal in February, and was taken alive to the Blue Reef Aquarium, Newquay, much to the delight of the curator, for it is so rare that the last record for this species in Cornish waters was 1984, and only 11 have ever been recorded, nine of which were pre 1907. The carapace is distinctive with bold transverse ridges bearing fringes of small bristles.



There were 6 reports of Bottlenose Dolphins during February, 5 of the pod of about 8 in the St Ives area and a pair seen off Lamorna on the 22nd. There were also 6 reports of Harbour Porpoises, all between Porthgwarra and The Brisons. Of two Basking Shark reports, one was off Pendeen on the 11th and three were seen heading slowly east

together on the surface off Battery Rocks on the 20th. 2 Risso's Dolphins were seen off Gwennap Head on 14th, a Grey Seal off Tater du on 15th, and 2 Fin Whales off The Isles of Scilly on 24th